

Westway and Imperium Expansion Projects

Draft Environmental Impact Statements



Noise and Vibration Fact Sheet

Increased noise and vibration could occur during construction and operation of the proposed projects. The increased rail traffic along the Puget Sound & Pacific (PS&P) rail line and increased vessel traffic within Grays Harbor could also increase noise and vibration. Increases from these activities could disturb people and places that are sensitive to noise and vibration, such as homes, schools, churches, or nursing homes.

What impacts on noise and vibration were analyzed?

The studies looked at how construction and operation of the proposed projects would result in increased noise and vibration at the projects sites, along the PS&P rail line, and around Grays Harbor.

How were the impacts analyzed?

Noise and vibration levels from construction and operation activities were estimated at various distances from the project sites to determine whether any homes, schools, nursing homes, or other sensitive groups would experience unacceptable noise or vibration. Background noise levels were measured at 28 places, including near the project sites, along the rail line, and in neighborhoods. Current noise levels are mostly from rail noise and train horns, as well as car and truck traffic. Anticipated noise and vibration increases from construction and operation of the proposed facilities were calculated based on methods used by the Federal Transit Authority and Federal Railroad Administration. They looked at noise from normal construction equipment operation, and the trains and ships that the proposed projects would use. The increases were compared to existing levels to assess whether any sensitive groups would experience high levels of noise or vibration along the PS&P rail line and around Grays Harbor.

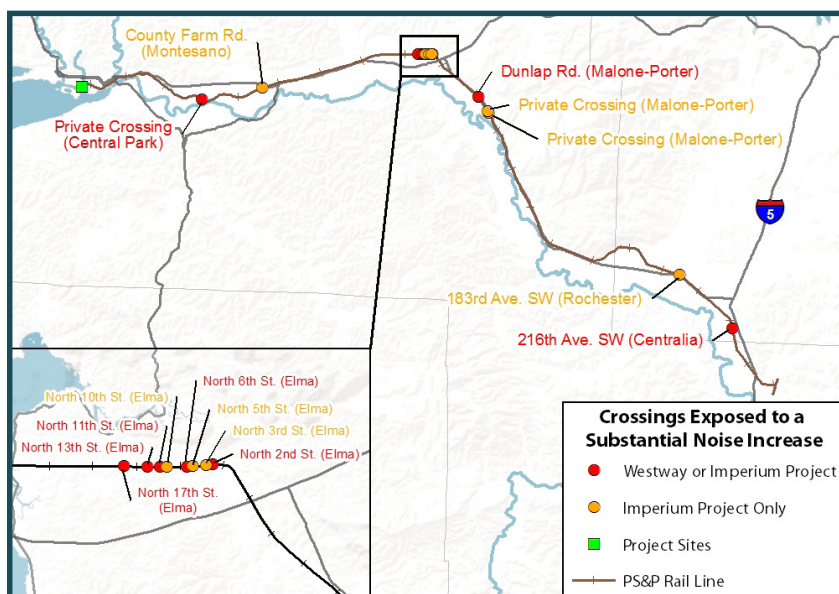
How will the proposed projects affect noise?

Construction and Operations

Construction would cause a temporary increase in noise and vibration near the project sites throughout the maximum 22 months of construction. No construction is proposed to happen at night. The noise generated would primarily be from equipment used for construction, such as pile-driving equipment, backhoes, cement mixers, and excavators.

The greatest noise increases would result from pile driving, which is expected to last approximately two to three months. The homes closest to the project sites are about 1,500 feet away, and the noise level from construction is not expected to be significant at that distance. Additionally, pile driving would only happen during daytime hours, reducing impacts to local residents. No significant impacts from vibration during construction were found.

As part of the proposed projects, the facilities would cause noise and vibration from equipment at the facilities, and during rail and vessel loading and unloading. The proposed levels would be similar to current noise levels from existing operations at the sites and the Port of Grays Harbor. The studies found there are no significant increases in noise and vibration to people living near the project sites.



Rail Traffic

As a result of the proposed projects, people near the PS&P rail line would be exposed more frequently to two types of train noise:

- Wayside noise - locomotive engines and car/wheel noise
- Horn noise - sound of horns for trains that warn people at road crossings

Rail and Vessel Trips per Year			
Transport	Without Projects	Proposed Project	
		Westway	Imperium
Rail	1,235	458	730
Vessel	436	238	400

The trains for the proposed projects would have the same types and levels of noise as current trains. But because of the increase in the number of trains, the average noise levels along the PS&P rail line would increase, mainly from horn noise.

In areas where existing noise levels are low, particularly at night, the increased train traffic would result in more noticeable noise, especially for homes located near the PS&P rail line. Homes near at-grade road crossings where trains are required to sound horns would have the most impact. The studies found significant impacts from noise to homes in the area between Satsop and Elma, and also at some homes near the rail line in Central Park, Malone-Porter, and Centralia.

Vessel Traffic

At the dock, noise from the vessels would not significantly impact nearby homes, and noise from increased vessel traffic in Grays Harbor would not have significant impacts. The nearest homes and other sensitive locations are more than 1,800 feet from the vessel traffic, and noise impacts would not exceed the normal limits at that distance.

How will the proposed projects affect vibration?

Rail Traffic

Vibration levels for trains are based on speed. There is no increase in speed for trains for the proposed projects. The studies found the impacts from vibration from the additional trains would be minimal.

Vessel Traffic

Vibration levels for vessels are based on distance from land. There is no change in the routes used by vessels for the proposed projects. The studies found sensitive receptors would experience no vibration on land from the additional vessels.

What can Westway and Imperium do to reduce impacts from noise and vibration?

The studies identify the following mitigation measures to reduce impacts from noise and vibration:

- During construction, Westway and Imperium will keep construction and maintenance equipment in good working order with mufflers to control noise.
- For rail traffic noise, Westway and Imperium will talk with PS&P and interested communities along the rail line about creating Quiet Zones. Quiet Zones can only be created by public agencies like cities and counties, and are approved by the Federal Railroad Administration. Quiet Zones are areas in which horns are not required to be sounded, as long as safety requirements are met.

Would the proposed projects cause any significant and unavoidable adverse impacts?

Noise from the additional trains would cause substantial impacts for some areas along the rail line between Centralia and the project sites. The most noise would be from train horns sounded near road crossings. Westway and Imperium will work with PS&P and interested communities on the creation of Quiet Zones. If these are not put in place, there would be impacts from noise from the proposed projects that would not be offset or mitigated.

Where is more information available?

Within the Draft EISs, Section 3.7, *Noise and Vibration*, has detailed information on current conditions, analysis and findings for the impacts of the proposed projects on noise and vibration. Section 3.5, *Animals*, also includes detailed information and analyses relevant to noise and vibration impacts on wildlife.

There is an additional fact sheet discussing *Plants and Animals*.

Visit www.ecy.wa.gov/GraysHarbor for more information on the proposed projects.